

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the present application.

IN THE CLAIMS:

Claims 1-19. (Canceled)

Claim 20. (Previously Presented) A method for amplifying a DNA, comprising the steps of

(a) preparing a cDNA comprising at least two kinds of nucleotide analogs by a reverse transcription reaction using an RNA as a template in the presence of at least one nucleotide analog selected from the group consisting of 7-Deaza-dGTP and dITP, and at least one nucleotide analog selected from the group consisting of 7-Deaza-dATP and hydroxymethyl dUTP; and

(b) amplifying a desired DNA from the cDNA obtained in the above step (a), in the presence of two or more kinds of nucleotide analogs, wherein at least one nucleotide analog is selected from the group consisting of 7-Deaza-dGTP and dITP, and at least one nucleotide analog is selected from the group consisting of 7-Deaza-dATP and hydroxymethyl dUTP, wherein the nucleotide analogs are uniformly incorporated into the resulting DNA and do not cause termination of the amplification, thereby selectively amplifying DNA of a target sequence derived from RNA.

Claim 21. (Previously Presented) The method according to claim 20, wherein the amplification of the desired DNA is carried out by a polymerase chain reaction.

Claim 22. (Canceled)

Claim 23. (Previously Presented) A method for amplifying a DNA, comprising the steps of:

(a) providing a template DNA comprising at least two kinds of nucleotide analogs, wherein at least one nucleotide analog is selected from the group consisting of 7-Deaza-dGTP and dITP, and at least one nucleotide analog is selected from the group consisting of 7-Deaza-dATP and hydroxymethyl dUTP; and

(b) amplifying a desired DNA from the template DNA of step (a) in the presence of the following substances (i) to (iii):

(i) at least one nucleotide analog selected from the group consisting of 7-Deaza-dGTP and dITP,

(ii) at least one nucleotide analog selected from the group consisting of 7-Deaza-dATP and hydroxymethyl dUTP, and

(iii) a compound for lowering the T_m value of a double-stranded nucleic acid,

wherein the nucleotide analogs (i) and (ii) are uniformly incorporated into the resulting DNA.

Claim 24. (Previously Presented) The method according to claim 23, wherein the amplification of the desired DNA is carried out by a polymerase chain reaction.

Claim 25. (Canceled).

Claim 26. (Previously Presented) The method according to claim 23, wherein said compound for lowering the T_m value of a double-stranded nucleic acid is selected from the group consisting of formamide, dimethyl sulfoxide and trimethyl glycine.

Claim 27. (Previously Presented) A method for amplifying a DNA comprising the steps of:

(a) preparing a cDNA by a reverse transcription reaction using RNA as a template in the presence of at least one nucleotide analog selected from the group consisting of 7-Deaza-dGTP and dITP, and at least one nucleotide analog selected from the group consisting of 7-Deaza-dATP and hydroxymethyl dUTP; and

(b) amplifying a desired DNA from the cDNA of the above step (a) in the presence of the following substances (i) to (iii):

(i) at least one nucleotide analog selected from the group consisting of 7-Deaza-dGTP and dITP,

(ii) at least one nucleotide analog selected from the group

consisting of 7-Deaza-dATP and hydroxymethyl dUTP, and

(iii) a compound for lowering the T_m value of a double-stranded nucleic acid, wherein the nucleotide analogs (i) and (ii) are uniformly incorporated into the resulting DNA, thereby selectively amplifying DNA of a target sequence derived from RNA.

Claim 28. (Previously Presented) The method according to claim 27, wherein the amplification of the desired DNA is carried out by a polymerase chain reaction.

Claim 29. (Canceled).

Claim 30. (Previously Presented) The method according to claim 27, wherein said compound for lowering the T_m value of a double-stranded nucleic acid is selected from the group consisting of formamide, dimethyl sulfoxide and trimethyl glycine.

Claim 31. (Previously Presented) A kit for amplifying a DNA in the presence of two or more kinds of nucleotide analogs by the use of a DNA fragment comprising at least two kinds of nucleotide analogs, wherein at least one nucleotide analog is selected from the group consisting of 7-Deaza-dGTP and dITP, and at least one nucleotide analog is selected from the group consisting of 7-Deaza-

dATP and hydroxymethyl dUTP as a template, comprising two or more kinds of nucleotide analogs, wherein the two or more nucleotide analogs are:

(i) at least one nucleotide analog selected from the group consisting of 7-Deaza-dGTP and dITP, and

(ii) at least one nucleotide analog selected from the group consisting of 7-Deaza-dATP and hydroxymethyl dUTP.

Claims 32-33. (Canceled).

Claim 34. (Previously Presented) A kit for amplifying a DNA in the presence of two or more kinds of nucleotide analogs by the use of a template DNA fragment comprising two kinds of nucleotide analogs, wherein at least one nucleotide analog is selected from the group consisting of 7-Deaza-dGTP and dITP, and at least one nucleotide analog is selected from the group consisting of 7-Deaza-dATP and hydroxymethyl dUTP, comprising two or more kinds of nucleotide analogs and a compound for lowering the T_m value of a double-stranded nucleic acid,

wherein the two or more kinds of nucleotide analogs are:

(i) at least one nucleotide analog selected from the group consisting of 7-Deaza-dGTP and dITP, and

(ii) at least one nucleotide analog selected from the group consisting of 7-Deaza-dATP and hydroxymethyl dUTP.

Claims 35-36. (Canceled).

Claim 37. (Previously Presented) The kit according to claim 34, wherein the compound for lowering T_m value of a double-stranded nucleic acid is at least one compound selected from the group consisting of formamide, dimethyl sulfoxide and trimethyl glycine.

Claims 38-39. (Canceled).

Claim 40. (Previously Presented) The kit according to claim 42, further comprising a thermostable DNA polymerase.

Claim 41. (Previously Presented) The kit according to claim 43, further comprising a thermostable DNA polymerase.

Claim 42. (Previously Presented) A kit for amplifying a DNA using a cDNA provided by a reverse transcription reaction in the presence of at least one nucleotide analog selected from the group consisting of 7-Deaza-dGTP and dITP, and at least one nucleotide analog selected from the group consisting of 7-Deaza-dATP and hydroxymethyl dUTP as a template, wherein said kit comprises the following components:

- (i) an enzyme having reverse transcriptase activity; and.

- (ii) at least one nucleotide analog selected from the group consisting of 7-Deaza-dGTP and dITP, and at least one nucleotide analog selected from the group consisting of 7-Deaza-dATP and hydroxymethyl dUTP which are used in the reverse transcription reaction.

Claim 43. (Previously Presented) A kit for amplifying a DNA using a cDNA provided by a reverse transcription reaction in the presence of at least one nucleotide analog selected from the group consisting of 7-Deaza-dGTP and dITP, and at least one nucleotide analog selected from the group consisting of 7-Deaza-dATP and hydroxymethyl dUTP as a template, wherein said kit comprises the following components:

- (i) an enzyme having reverse transcriptase activity;
- (ii) at least one nucleotide analog selected from the group consisting of 7-Deaza-dGTP and dITP, and at least one nucleotide analog selected from the group consisting of 7-Deaza-dATP and hydroxymethyl dUTP which are used in the reverse transcription reaction; and
- (iii) a compound for lowering the T_m value of a double-stranded nucleic acid.

Claim 44. (New) The method according to claim 20, wherein both of 7-Deaza-dGTP and 7-Deaza-dATP are used in step (a) and (b) as the nucleotide analogs.

Claim 45. (New) The method according to claim 23, wherein both of 7-Deaza-dGTP and 7-Deaza-dATP are used in step (a) and (b) as the nucleotide analogs.

Claim 46. (New) The method according to claim 27, wherein both of 7-Deaza-dGTP and 7-Deaza-dATP are used in step (a) and (b) as the nucleotide analogs.

Claim 47. (New) The kit according to claim 31, wherein said kit comprises 7-Deaza-dGTP and 7-Deaza-dATP.

Claim 48. (New) The kit according to claim 34, wherein said kit comprises 7-Deaza-dGTP and 7-Deaza-dATP.